Patent claims:

1. A process for granulating slag, in particular from a blast furnace and/or a smelting reduction plant, in which a granule/water mixture formed during the granulation is fed to a granulation tank (4) and then to a dewatering installation, in which the slag granules are dewatered, the H_2S-containing vapors and gases formed during the granulation being at least partially condensed by injection of water in a condensation space which is flow-connected to the granulation tank (4), characterized in that H_2S-containing residual gases are discharged from the condensation space below the water injection point, and H_2S is burnt.

2. The process as claimed in Claim 1, characterized in that the burning is carried out in a combustion chamber (16).

3. The process as claimed in Claim 1, characterized in that the residual gases, after they have been discharged from the condensation space, are passed in countercurrent to the hot slag, and in the process H_2S is burnt to form SO_2, if appropriate with heat being supplied by means of an ancillary flame.

4. The process as claimed in one of Claims 1 to 3, characterized in that the combustion flue gas is cooled with water, and the SO_2 formed from H_2S is precipitated.

5. The process as claimed in one of Claims 1 to 4, characterized in that the granulation tank (4) is partitioned off in a gastight manner from the dewatering installation.

6. The process as claimed in one of Claims 1 to 5, characterized in that a superatmospheric pressure is set in the granulation tank (4) and in the condensation space below the water injection point.

7. The process as claimed in one of Claims 1 to 6, characterized in that vapors and gases formed in the dewatering installation are passed into the condensation space above the water injection point.

8. The process as claimed in Claim 7, characterized in that a subatmospheric pressure is set in the condensation space above the water injection point.

9. The process as claimed in Claim 7 or 8, characterized in that the quantity of vapor and gas passed into the condensation space by means of a sucking action is controlled by means of the quantity of water injected and is kept at a minimum.

10. The process as claimed in one of Claims 1 to 9, characterized in that condensate formed in the condensation space and injected water are discharged from the condensation space and fed to the water which has been separated off in the dewatering installation and is recirculated for granulation and water injection.

11. The process as claimed in one of Claims 1 to 10, characterized in that the quantity of injected water is controlled as a function of the slag rate.

12. An installation for granulating slag, in particular from a blast furnace and/or a smelting reduction plant, comprising a slag channel (1) for delivering the hot slag to a granulation device (2), preferably a spray head, a downstream granulation tank (4) for holding a granule/water mixture, a condensation device (10), preferably a condensation tower, which is flow-connected to the granulation tank (4) and has a water feed (12) and a device (11) for injecting water, and a granule dewatering installation, characterized in that a discharge line (15) for discharging vapors and gases, which is pipe-connected to a combustion chamber (16), is provided in the condensation device (10) below the device (11) for injecting water.

13. An installation for granulating slag, in particular from a blast furnace and/or a smelting reduction plant, comprising a slag channel (1), which is provided with an extractor hood (18), for delivering the hot slag to a granulation device (2), preferably a spray head, a downstream granulation tank (4) for holding a granule/water mixture, a condensation device (10), preferably a condensation tower, which is flow-connected to the granulation tank (4) and has a water feed (12) and a device (11) for injecting water, and a granule dewatering installation, characterized in that a discharge line (15) for discharging vapors and gases, which opens out into the slag channel (1) between the granulation device (2) and the extractor hood (18), is provided in the condensation device (10) below the device (11) for injecting water.

14. The installation as claimed in Claim 12 or 13, characterized in that a water cooler (17) for the

combustion flue gases is provided downstream of the combustion chamber (16) and/or downstream of the extractor hood (18) of the slag channel (1).

15. The installation as claimed in Claim 13 or 14, characterized in that the slag channel (1) comprises a burner (19) for generating an ancillary flame.

16. The installation as claimed in one of Claims 12 to 15, characterized in that the granule dewatering installation comprises at least one dewatering device (6a, 6b) and a water basin (7a, 7b, 7c), which are provided with a covering hood (21a, 21b, 21c), and a discharge line (22) for discharging vapors and gases, which opens out in the condensation device (10) above the device (11) for injecting water, leads away from the covering hood (21a, 21b, 21c).

17. The installation as claimed in one of Claims 12 to 16, characterized in that a gas barrier (20) is provided between the granulation tank (4) and the granule dewatering installation.

18. The installation as claimed in one of Claims 12 to 17, characterized in that a means (13) for trapping water and condensate is provided in the condensation device (10) below the device (11) for the injection of water, from which means (13) leads a discharge line (14) which opens out into the granule dewatering device, in particular the water basin (7c).

19. The installation as claimed in one of Claims 12 to 18, characterized in that the granule dewatering installation, in particular the water basin (7c), is pipe-connected to the water feed (12) of the

condensation device (10) and/or the granulation device (2).